## DEPARTMENT OF THE ARMY U.S. Army Corps of Engineers Washington, DC 20314-1000

EM 1110-2-1902

**CECW-EW** 

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## Engineering and Design SLOPE STABILITY

- **1. Purpose.** This engineer manual (EM) provides guidance for analyzing the static stability of slopes of earth and rock-fill dams, slopes of other types of embankments, excavated slopes, and natural slopes in soil and soft rock. Methods for analysis of slope stability are described and are illustrated by examples in the appendixes. Criteria are presented for strength tests, analysis conditions, and factors of safety. The criteria in this EM are to be used with methods of stability analysis that satisfy all conditions of equilibrium. Methods that do not satisfy all conditions of equilibrium may involve significant inaccuracies and should be used only under the restricted conditions described herein.
- **2. Applicability.** This EM is applicable to all USACE elements and field operating activities having responsibility for analyzing stability of slopes.
- **3. Distribution Statement.** This publication is approved for public release; distribution is unlimited.
- **4. Scope of the Manual.** This manual is intended to guide design and construction engineer, rather than to specify rigid procedures to be followed in connection with a particular project.

FOR THE COMMANDER:

7 Appendixes (See Table of Contents)

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